

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997715

Luminaire Tested: SA2XXRDP-B290DB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B290DB2750-4F0-XX-W2A-F_5000K
Description: Define 2 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

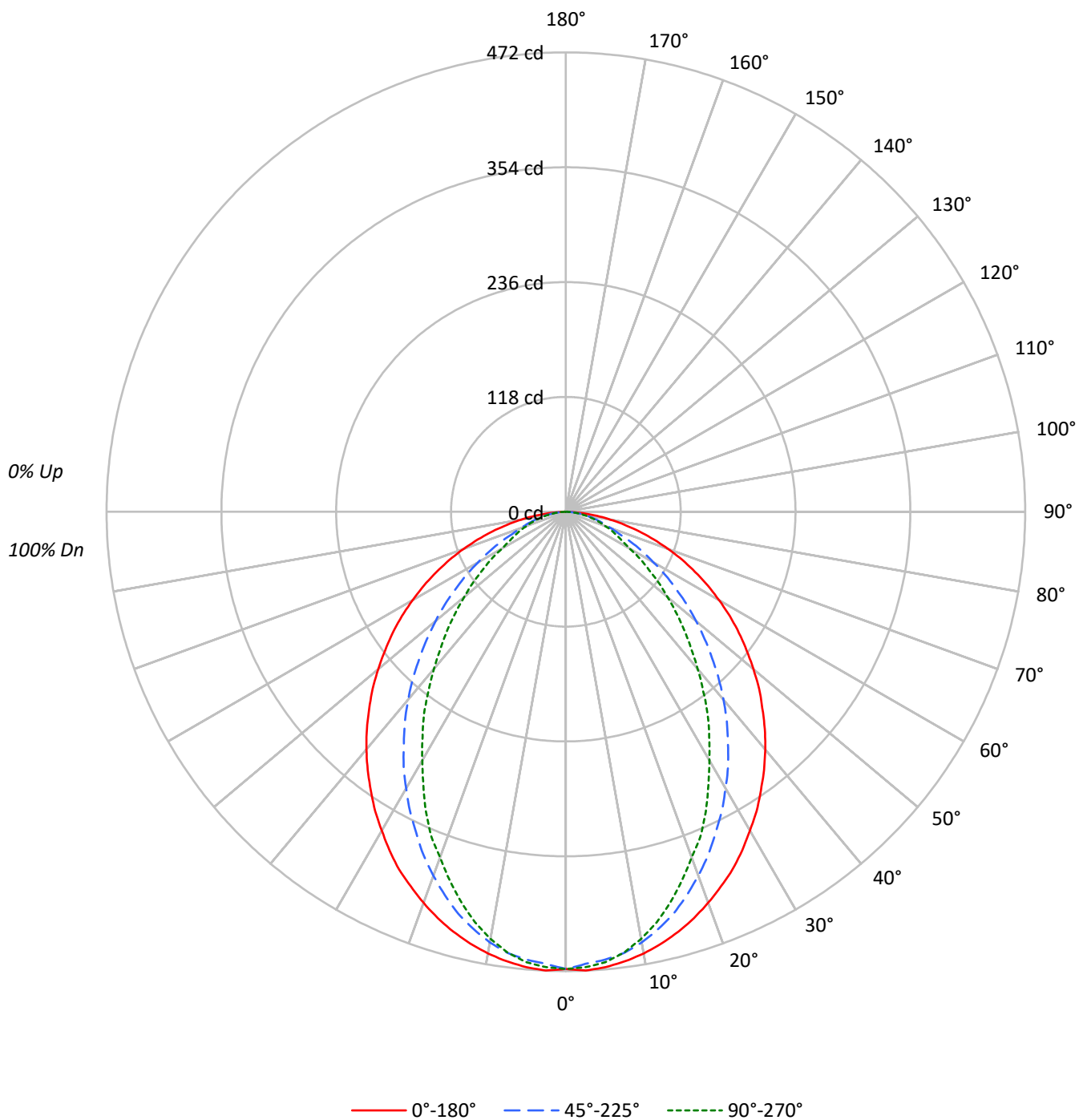
Lumens per Lamp: N/A
Luminaire Lumens: 966.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43		
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35		
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32		
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7435	7435	7435
5°	7463	7341	7382
10°	7407	7222	7161
15°	7320	7007	6806
20°	7203	6703	6366
25°	7082	6356	5940
30°	6915	5999	5392
35°	6752	5610	4912
40°	6588	5209	4356
45°	6393	4757	3855
50°	6196	4302	3359
55°	5994	3811	2887
60°	5759	3296	2397
65°	5491	2772	2180
70°	5174	2282	2009
75°	4783	2079	1871
80°	4221	1860	1705
85°	3324	1471	1471

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	4.6
10°-20°	120.8	12.5
20°-30°	169.7	17.6
30°-40°	184.9	19.1
40°-50°	170.0	17.6
50°-60°	133.5	13.8
60°-70°	86.9	9.0
70°-80°	44.7	4.6
80°-90°	11.4	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	334.5	34.6
0°-40°	519.5	53.8
0°-60°	823.0	85.2
0°-90°	966.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	966.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	470	468	462	466	465	45
15°	447	442	428	420	415	126
25°	406	392	364	346	340	186
35°	349	328	290	264	254	219
45°	286	257	212	182	172	221
55°	217	184	138	113	105	194
65°	147	112	74	60	58	145
75°	78	48	34	31	31	83
85°	18	9	8	8	8	22
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.7	469.7	469.7	469.7	469.7
2.5°	471.8	469.7	465.0	469.3	468.4
5°	469.7	467.6	462.0	465.9	464.6
7.5°	465.9	463.3	457.4	459.1	456.9
10°	460.8	457.8	449.3	448.0	445.5
12.5°	454.4	450.6	439.1	436.5	431.9
15°	446.7	442.1	427.6	419.5	415.3
17.5°	437.8	431.0	413.2	403.8	397.0
20°	427.6	419.1	397.9	387.2	377.9
22.5°	416.6	406.8	382.1	367.7	361.3
25°	405.5	391.9	363.9	346.4	340.1
27.5°	392.3	377.9	346.9	326.9	317.1
30°	378.3	362.2	328.2	306.5	295.0
32.5°	364.7	345.2	310.3	284.8	274.2
35°	349.4	327.7	290.3	263.5	254.2
37.5°	334.5	311.2	271.6	242.3	231.7
40°	318.8	293.3	252.1	221.9	210.8
42.5°	302.6	275.4	232.5	201.1	190.4
45°	285.6	257.2	212.5	182.4	172.2
47.5°	269.5	239.3	193.4	163.2	153.9
50°	251.6	221.5	174.7	145.4	136.4
52.5°	234.2	202.3	156.9	128.8	120.7
55°	217.2	184.1	138.1	112.6	104.6
57.5°	199.8	165.8	121.6	97.8	91.0
60°	181.9	147.9	104.1	82.5	75.7
62.5°	164.5	130.5	89.3	68.9	65.5
65°	146.6	112.2	74.0	59.5	58.2
67.5°	129.6	95.2	59.5	52.3	51.0
70°	111.8	78.6	49.3	45.1	43.4
72.5°	94.8	63.3	41.2	37.8	37.0
75°	78.2	48.5	34.0	31.0	30.6
77.5°	61.6	34.4	26.8	25.1	24.2
80°	46.3	24.7	20.4	18.7	18.7
82.5°	32.3	16.6	14.0	13.2	13.2
85°	18.3	9.4	8.1	8.1	8.1
87.5°	6.8	3.4	3.4	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.21	19.73	18.57	20.04	20.36	14.17	15.69	14.53	16.00	16.32
	3H	19.97	21.34	20.35	21.66	22.02	15.43	16.80	15.81	17.13	17.49
	4H	20.64	21.92	21.04	22.27	22.64	15.93	17.21	16.33	17.56	17.94
	6H	21.12	22.31	21.54	22.67	23.07	16.31	17.50	16.73	17.86	18.26
	8H	21.29	22.42	21.72	22.81	23.21	16.44	17.57	16.87	17.96	18.36
	12H	21.39	22.47	21.82	22.85	23.28	16.52	17.60	16.95	17.98	18.41
4H	2H	18.31	19.59	18.71	19.94	20.32	14.86	16.14	15.26	16.49	16.87
	3H	20.24	21.30	20.65	21.70	22.11	16.31	17.37	16.72	17.77	18.17
	4H	20.99	21.95	21.42	22.36	22.80	16.90	17.86	17.34	18.28	18.72
	6H	21.58	22.42	22.04	22.86	23.32	17.39	18.22	17.85	18.67	19.13
	8H	21.80	22.58	22.26	23.02	23.49	17.55	18.33	18.02	18.78	19.24
	12H	21.95	22.65	22.43	23.12	23.60	17.67	18.37	18.16	18.85	19.32
8H	4H	21.02	21.79	21.48	22.24	22.70	17.26	18.04	17.72	18.48	18.95
	6H	21.65	22.30	22.15	22.79	23.26	17.84	18.49	18.34	18.98	19.46
	8H	21.90	22.48	22.42	22.99	23.48	18.07	18.64	18.58	19.15	19.64
	12H	22.11	22.62	22.62	23.11	23.68	18.25	18.76	18.76	19.25	19.81
12H	4H	21.00	21.70	21.48	22.17	22.64	17.30	18.00	17.78	18.47	18.95
	6H	21.63	22.21	22.15	22.72	23.21	17.91	18.49	18.42	19.00	19.48
	8H	21.92	22.43	22.43	22.92	23.49	18.18	18.69	18.69	19.18	19.75